

Product Bulletin

Tag-it™ HF-I Family Transponder Inlays

Description

Texas Instruments' Tag-it™ HF-I family of transponder inlays consist of 13.56-MHz high-frequency (HF) transponders that are compliant with the ISO/IEC 15693 and ISO/IEC 18000-3 global open standards. These products are available in six different antenna shapes with frequency offset for integration into paper, PVC or other substrates.

Tag-it HF-I transponder inlays are manufactured with TI's patented laser-tuning process to provide consistent read performance. Prior to delivery, the transponders undergo complete functional and parametric testing, in order to provide the high quality customers have come to expect from TI.

The Tag-it HF-I transponder inlays are well suited for a variety of applications including, but not limited to, product authentication, library applications, supply chain management, asset management and ticketing/stored value applications.

Tag-it™ HF-Family Product Specifications

Supported Standards	ISO/IEC 15693-2, -3; ISO/IEC18000-3
Recommended Operating frequency	13.56 MHz
Factory programmed Read Only Number	64 bits
Typical programming cycles (at +25°C)	100,000
Data retention time (at +55°C)	>10 years

Key Features

- ISO/IEC 15693 –2,–3; ISO/IEC18000-3
- User and factory lock per block
- Application Family Identifier (AFI)

Standard

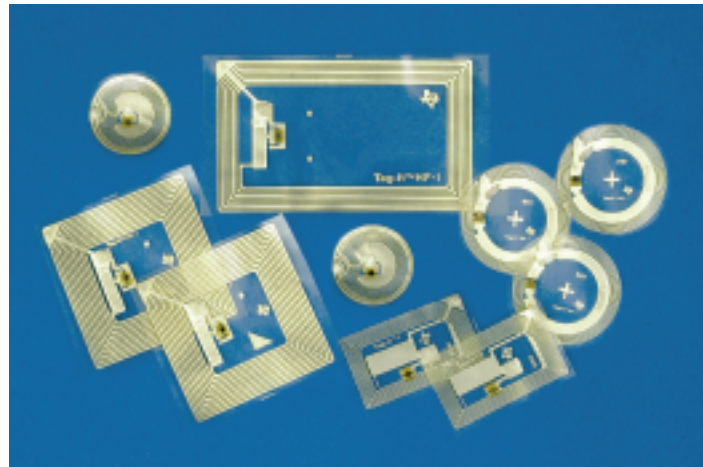
- 256-bit user memory, 8x32 bit
- FastSID

Pro

- 256-bit user memory, 8x32 bit
- Password-protected write command
- Command to disable IC functionality
- FastSID

Plus

- 2K-bit user memory, 64x32 bit
- Data Storage Format Identifier (DSFID)
- Combined Inventory Read Block



Tag-it™ HF-I Family transponder inlays are available in a variety of package options, including square, circular and rectangular (regular and mini).

Tag-it™ HF-Plus Inlay Shapes

Part Number	RI-I11-112A	RI-I11-112B	RI-I02-112A	RI-I02-112B	RI-I03-112A	RI-I15-112B	RI-I16-112A	RI-I17-112A
Memory (user programmable)	2K bits organized in 64 x 32-bit blocks							
Antenna size (mm)	45 x 45	45 x 45	45 x 76	45 x 76	22.5 x 38	34 x 65	Ø 24.2	Ø 32.5
Foil pitch (mm)	50.8 +0.1 /-0.4 (2in)	50.8 +0.1 /-0.4 (2in)	96 +0.1/ -0.4 (~3.78 in)	96 +0.1/ -0.4 (~3.78 in)	48 +0.1 /-0.4 (~1.89 in)	101.6 +0.1 /-0.4 (4in)	50.8 +0.1 /-0.4 (2in)	50.8 +0.1 /-0.4 (2in)
Frequency Offset for lamination material	Paper	PVC	Paper	PVC	Paper/PVC	PVC	Paper/PVC	Paper/PVC
Delivery	Single row tape with 48-mm foil width wound on cardboard reel							

Tag-it™ HF-I Pro Transponder Inlays

Part Number	RI-I11-114A-S1	RI-I11-114B-S1	RI-I02-114A-S1	RI-I02-114B-S1	RI-I03-114-S1	RI-I16-114-S1	RI-I17-114-S1
Available Memory	256 bits organized in 8 x 32-bit blocks						
Foil width (mm)	48 mm ± 0.5 mm						
Antenna size (mm)	45 x 45	45 x 45	45 x 76	45 x 76	22.5 x 38	Ø 24.2	Ø 32.5
Foil pitch (mm)	50.8 +0.1 / -0.4 (2in)	50.8 +0.1 / -0.4 (2in)	96 +0.1 / -0.4 (~3.78 in)	96 +0.1 / -0.4 (~3.78 in)	48 +0.1 / -0.4 (~1.89 in)	50.8 +0.1 / -0.4 (2in)	50.8 +0.1 / -0.4 (2in)
Frequency Offset for lamination material	Paper	PVC	Paper	PVC	Paper/PVC	Paper/PVC	Paper/PVC
Delivery	Single row tape wound on cardboard reel						

Tag-it™ HF-I Standard Transponder Inlays

Part Number	RI-I11-114A-01	RI-I11-114B-01	RI-I02-114A-01	RI-I02-114B-01	RI-I03-114-01	RI-I16-114-01	RI-I17-114-01
Available Memory	256 bits organized in 8 x 32-bit blocks						
Foil width (mm)	48 mm ± 0.5 mm						
Antenna size (mm)	45 x 45	45 x 45	45 x 76	45 x 76	22.5 x 38	Ø 24.2	Ø 32.5
Foil pitch (mm)	50.8 +0.1 / -0.4 (2in)	50.8 +0.1 / -0.4 (2in)	96 +0.1 / -0.4 (~3.78 in)	96 +0.1 / -0.4 (~3.78 in)	48 +0.1 / -0.4 (~1.89 in)	50.8 +0.1 / -0.4 (2in)	50.8 +0.1 / -0.4 (2in)
Frequency Offset for lamination material	Paper	PVC	Paper	PVC	Paper/PVC	Paper/PVC	Paper/PVC
Delivery	Single row tape wound on cardboard reel						

For more information, contact the sales office or distributor nearest you. This contact information can be found on our web site at: <http://www.ti-rfid.com>

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